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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/277,298	03/26/1999	GEORGE E. CARTER	99P7519US	3318

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SIEMENS CORPORATION
INTELLECTUAL PROPERTY DEPARTMENT
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EXAMINER

ARANI, TAGHI T

ART UNIT	PAPER NUMBER
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2131

DATE MAILED: 08/19/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/277,298	CARTER, GEORGE E.	
	Examiner	Art Unit	
	Taghi T. Arani	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11,13,14 and 16-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11,13,14 and 16-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Claims 1-11, 13-14, 16-31 were pending for examination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims **1-3, 6, 8-11, 13, 16, 17-19 and 21, 25-27, and 29-30** are rejected under 35 U.S.C. 103(e) as being unpatentable over Knappe et al., US pat. 6,603,774 filed Oct. 1998 and further in view of Satio et al, US Pat. No. 6, 125,186, filed July 1997 (cited in the previous office actions).

As per claims **1-3, 6, 8-11, 13, 16, 17-19 and 21, 25-27, and 29-30**, Knappe et al. is directed to a packet telephony applications wherein voice packets are redirected to a codec proxy system which allow non-standard or feature specific packet voice endpoints (i.e. telephony clients) to interoperate in a standard-based network, see abstract.

Knappe telephony clients are connected to packet networks through respective gateways, see col. 2, lines 40-61, see also Fig. 1, numeral elements 16 and 20.

Knappe further teaches that the gateways can be VoIP telephones or personal computers that include a digital signal processor and software for recording audio signals into audio packets. Knappe's codec proxy system (Fig. 1 numeral element 24) is coupled to the packet network and is used for setting up calls between telephony systems A and B (with different formatting features), see col. 2, line 62 through col. 3 line 6.

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Knappe codec proxy system comprises a capability exchange broker and a packet transmitting and rebuffering circuit which can spoof the two telephony systems to provide a capability exchange proxy to determine codec choices for the first and second telephony systems A and B and generates configuration and control information that identifies the necessary transcoding required between two telephony systems, see col. 3, line 66 through col. 4, line 50, see ALSO Fig. 2, numeral elements 24, 33, 34, 36,38.

Knappe teaches encoder and decoders used for sending packets from telephony system A and to telephony system B. Sound cards and the corresponding drivers interfacing the sound cards (**recited in claims 17 and 25**) are inherent in Knappe's codec proxy and the telephony system codec.

That is to say, Knappe's codec proxy broker is acting as both a formatting module and an interpreting module recited in **claims 1, 8, 11, 13, and 17-21**.

Knappe fails to teach "inserting a security algorithm within the communication path"

However, Satio is directed to an encryption communication method and system in which encrypted data are transmitted between a first terminal and a second terminal without having to preinstall the same encryption program in them. col. 1, lines 45-55.

In an exemplary embodiment, Satio teaches the case in which the encrypted communication is used in an electronic conferencing system (i.e. computer telephony), see col. 16, lines 19-52.

Satio teaches that a trusted agent for the purpose of encryption processing is installed in the sending terminal (i.e. a first computer or a server). Before transmitting data, the sending terminal sends an agent (or mobile code) having the same function as the installed agent to the receiving terminal (i.e. a second computer). When the data are transferred, the data are encrypted

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using the agent in the first computer, and decrypted in the receiving computer (i.e. a second computer) using the mobile code that was sent by the first computer, see col. 3, lines 7-33. That is a security algorithm is inserted within the communication path, see Fig. 1, numeral element 18.

Satio further discloses application programs (i.e. telephony clients) for telephone, television, conference, video transmission, etc. which performs processing that accompanies sending data to and receiving data from the client, see col. 3, lines 39-50, see also Fig. 1, numeral elements 13 and 16.

Satio teaches that the cryptographic processing can be employed in operating system kernel (**recited in claim 6**). That is, the security mechanism is not visible to the user (i.e. is not implemented in the user mode), see col. 17, lines 35-40.

It would have been obvious to one ordinary skill in the art to modify Knappe's method of voice packets in telephony application to that of Satio by providing encryption agent to telephony clients (or terminals) to conduct encrypted communication even with a terminal that does not have a program for encryption processing and reliably decrypting the communication in the receiving terminal (telephony client), see col. 3, lines 17-32.

As per claim 11, Knappe's codec proxy system coupled to the packet network and is user for setting up calls between first telephony client (i.e. system A) and a second telephony system (i.e. system B), see col. 2, lines 62 through col. 3, line 5. Knappe's codec proxy includes a processor programmed to perform the proxy services.

Claims 4, 5 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knappe et al and Satio as applied to claims 1-3 above, and further in view of Crick et al, US. Pat. No. 5,675,793, issued Oct. 1997 (cited in the previous office actions).

As per claim 4, Satio is silent on inserting the security algorithm between the I/O supervisor and a sound class driver.

However, Crick discloses a computer system with a software system having a layered architecture, see col. 2, lines 58-67.

In Crick's computer system, computer programs in the higher layers request services of the computer programs in the lower layers, see col. 3, lines 4-16.

In doing so, an I/O supervisor passes the request to a chain of device drivers (such as sound class drivers) by invoking the component device drivers and the requested data is finally passed to the application program requesting the service, see col. 3, lines 17-44.

Crick further discloses that component device drivers may in between encrypt and decrypt (i.e. insert a security mechanism) the requested data, see col. 3, lines 31-33.

It would have been obvious to one ordinary skill in the art to employ the layered software architecture of crick into that of Satio to be able to develop component device drivers (such as Satio's trusted agent) independent of one another, see col. 3, lines 45-57.

As per claims 5 and 28, Satio teaches that the trusted agent has cryptographic processing units to encrypt data by different method. Satio further teaches a an encryption method selection unit which selects one of the cryptographic processing units in accordance with an instruction from the encryption method selection control unit, see col. 6, lines 10-25.

Satio is silent on selecting an algorithm from a group consisting of an IDEA, a DES, a GOST, an RC5, and a SEAL algorithm.

The examiner asserts that DES, IDEA, GOST, RC5 and SEAL algorithms are industry standard block cipher algorithms used in various applications where a balance on processing speed and the security level is required.

It would have been obvious to one ordinary skill in the art to adapt the encryption method selection unit of Satio to select one of DES, IDEA, GOST, RC5 and the SEAL algorithm which most suits the security level and the processing speed required .

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Knappe et al and Satio as applied to claim 6 above, and further in view of Kavsan, US pat. No. 6,412,069, filed Sep. 1998 (cited in the previous office actions).

Kavsan is directed to a cryptographic service software which is compatible and communicates with a standard operating system computer. Kavsan's cryptographic service software is situated in kernel space of the operating system, see col. 2, lines 50-67.

Kavsan further teaches that the cryptographic service software is capable of encrypting hard drive data and IP packet at the driver level of the personal computer. That is, the Kavsan's cryptographic service software is independent of higher level application programs (i.e. telephony clients).

Claims 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Knappe et al., and Satio et al. and further in view of the Examiner Official Notice

Claim 20 differs from claim 13 in that encryption algorithm is selected from a group consisting of an IDEA encryption algorithm, a DES encryption algorithm, a GOST algorithm, an RC5 algorithm and a SEAL algorithm"

Satio is silent on selecting an algorithm from a group consisting of an IDEA, a DES, a GOST, an RC5, and a SEAL algorithm.

The examiner asserts that DES, IDEA, GOST, RC5 and SEAL algorithms are industry standard block cipher algorithms used in various applications where a balance on processing speed and the security level is required.

It would have been obvious to one ordinary skill in the art to adapt the encryption method selection unit of Satio to select one of DES, IDEA, GOST, RC5 and the SEAL algorithm which most suits the security level and the processing speed required .

As per claim 14 and 22-24, Knappe 's packet transcoding circuit uses configuration and control information to transcode between the G.72, G.711 for different types of telephony clients (i.e. telephony clients A and B) and that telephony client A has different codec that telephony clients B, etc., see col. 4, lines 31-49, see also col. 5, lines 14-64.

Conclusion

Any inquiry concerning this communication or earlier communications from examiner should be directed to Taghi Arani, whose telephone number is (703) 305-4274. The examiner can normally be reached Monday through Friday from 7:30 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gail Hayes, can be reached at (703) 305-9711. The Fax numbers for the organization where this application is assigned are:

After-final (703) 746-7238


Official (703) 746-7239

Non-Official/Draft (703) 746-7240

Taghi Arani

Patent Examiner

August 6, 2003


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